WHAT IS CLAIMED IS:

1. A method of reading an array of moieties on at least a portion of a surface of a transparent slide which is opposite a first portion on an opposite surface, which array has been previously exposed to a sample, the method comprising:

(a) mounting the slide on a slide holder and retaining the slide thereon in a mounted position without the array contacting the holder; and

(b) inserting the holder into an array reader and reading the array.

2. A method of reading an array of moieties on at least a portion of a rear surface of a transparent slide which is opposite a first portion on the front surface, which array has been previously exposed to a sample, the method comprising:

(a) mounting the slide on a slide holder and retaining the slide thereon in a mounted position in which the previously exposed array faces, and is spaced apart from, a backer member of the holder without the array contacting the holder; and

(b) inserting the holder into an array reader and reading the array.

3. A method according to claim 2 wherein the moieties are polynucleotides of different sequences.

4. A method according to claim 3 wherein the moieties are DNA of different sequences.

5. A method according to claim 2 wherein the array is read through the front side of the slide.

6. A method according to claim 5 wherein the array reading comprises directing a light beam through the slide from the front side and onto the array, and detecting a resulting signal from the array which has passed through the slide and out the slide front side.

7. A method according to claim 1 wherein the holder has front and rear clamp sets which can be moved apart to receive the slide therebetween, and wherein the slide is

retained in the mounted position by the clamp sets being urged against portions of the front and rear surfaces, respectively.

8. A method according to claim 2 wherein the holder has front and rear clamp sets which can be moved apart to receive the slide therebetween, and wherein the slide is retained in the mounted position by the clamp sets being urged against portions of the front and rear surfaces, respectively.

9. A method according to claim 1 wherein the holder has:

a body having side portions and a channel intermediate the side portions and extending in a direction between ends of the body; and

front and rear clamp member sets with members disposed about the channel, one set of which is fixed to the body side portions while the other set is movable to an open position away from the fixed set;

and wherein the slide is retained in the mounted position by being urged against the fixed clamp member set.

10. A method according to claim 2 wherein the holder has:

a body having side portions and a channel intermediate the side portions and extending in a direction between ends of the body, the backer member comprising a bottom surface of the channel; and

front and rear clamp member sets with members disposed about the channel, one set of which is fixed to the body side portions while the other set is movable to an open position away from the fixed set;

and wherein the slide is retained in the mounted position by being urged against the fixed clamp member set.

11. A method according to claim 10 wherein the clamp sets are resiliently urged toward one another, and wherein the movable set is moved to the open position prior to mounting the slide on the holder.

12. A method according to claim 11 additionally comprising a control member set positioned on the holder outside the channel and wherein the control member set is moved to move the movable clamp set to the open position.

13. A method according to claim 12 wherein the front clamp member set is fixed to the body side portions and the rear clamp member set is movable.

14. A method according to claim 13 wherein the control member set is moved rearward to move the clamp member set to the open position.

15. A method according to claim 2 wherein the holder additionally has a body having a channel with a closed end, wherein the backer member comprises a bottom surface of the channel;

and wherein the mounting of the slide on the holder comprises sliding the slide in an endways direction of the channel and into the mounted position in which a leading end of the slide abuts the closed end of the channel.

16. A method according to claim 11 wherein members of each of the front and rear clamp member sets are disposed on opposite sides of the channel, and wherein the mounting of the slide on the holder comprises, when the clamp member sets are in the open position, sliding the slide in an endways direction of the channel between the clamp member sets and into the mounted position.

17. A method according to claim 16 wherein the holder additionally has two spaced apart guides extending from the body adjacent respective sides of the channel, and wherein the slide is slid into the mounted position along the guides and in which mounted position a trailing end of the slide is positioned between the guides.

18. A method according to claim 17 wherein during the mounting of the slide portions of the slide front and rear surfaces are gripped and the gripped portions used to then slides the slide into the mounted position, which gripped portions are positioned between the guides when the slide is in the mounted position.

19. A method according to claim 18 additionally comprising removing the slide from the mounted position, the removing comprising gripping portions of the slide front and rear surfaces which are between the guides and using the gripped portions to slide the slide in an endways direction opposite to that during the slide mounting.

20. A holder for a transparent slide having front and rear surfaces, and carrying moieties on at least a portion of the rear surface which is opposite a first portion on the front surface, comprising:

(a) a backer member;

(b) front and rear clamp sets which can be moved apart to receive the slide therebetween in a mounted position on the holder, and which are urged against the mounted slide out of contact with the moieties and the first portion of the front surface to retain the slide with the moieties facing, and spaced apart from, the backer member.

21. A holder according to claim 20 wherein the clamp members are positioned such that the holder can receive and retain a slide having an area of no more than 200 cm^2.

22. A holder according to claim 21 wherein the moieties on the rear side of the retained slide are spaced from the backer member by between 0.1 mm to 10 mm.

23. A holder according to claim 20 wherein the holder is rectangular in shape with a maximum area of a side of no more than 100 cm^2.

24. A holder according to claim 22 wherein the clamp members are resiliently urged against the mounted slide.

25. A holder according to claim 23 wherein the clamp members are urged against the slide front and rear surfaces adjacent a periphery of the slide.

26. A holder according to claim 23 wherein the backer is opaque.

27. A holder according to claim 20 additionally comprising a body having a channel, wherein the backer member comprises a bottom surface of the channel.

28. A holder for a transparent slide having front and rear surfaces, and carrying moieties on at least a portion of one of the surfaces which is opposite a first portion on the other of the surfaces, comprising:

(a) a body having side portions and a channel intermediate the side portions and extending in a direction between ends of the body;

(b) front and rear clamp member sets with members disposed about the channel, one set of which is fixed to the body side portions while the other set is movable to an open position away from the fixed set so as to receive the slide between the sets and urge the mounted slide against the fixed set to retain the slide between the sets, wherein both clamp sets are out of contact with the moieties and the first portion of the mounted slide.

29. A holder according to claim 28 additionally comprising two spaced apart guides extending from the body adjacent respective sides of the channel so as to guide the sliding of the slide into the mounted position while allowing a user's fingers to grasp opposite sides of the mounted slide at a position between the guides.

30. A holder for a transparent slide having front and rear surfaces, and carrying moieties on at least a portion of the rear surface which is opposite a first portion on the front surface, comprising:

(a) a body having side portions and a channel intermediate the side portions and extending in a direction between ends of the body;

(b) front and rear clamp member sets with members disposed about the channel, one set of which is fixed to the body side portions while the other set is movable to an open position away from the fixed set so as to receive the slide between the sets and urge the mounted slide against the fixed set to retain the slide between the sets with the rear surface facing, and spaced apart from, a bottom surface of the channel, wherein both clamp sets are out of contact with the moieties and the first portion of the mounted slide.

31. A holder according to claim 30 wherein the clamp sets are resiliently urged toward one another.

32. A holder according to claim 30 additionally comprising a control member set positioned on the holder outside the channel and connected to move the movable clamp set to the open position.

33. A holder according to claim 32 wherein the control member set is on a front side of the holder.

34. A holder according to claim 33 wherein the front clamp member set is fixed to the body side portions and the rear clamp member set is movable.

35. A holder according to claim 34 wherein rearward movement of the control member moves the rear clamp member set to the open position.

36. A holder according to claim 30 wherein members of each of the front and rear clamp member sets are disposed on opposite sides of the channel such that when the sets are in the open position the slide can be slid in an endways direction of the channel between the members and into the mounted position.

37. A holder according to claim 36 additionally comprising two spaced apart guides extending from the body adjacent respective sides of the channel so as to guide the sliding of the slide into the mounted position while allowing a user's fingers to grasp opposite sides of the mounted slide at a position between the guides.

38. A holder according to claim 37 wherein the channel is no wider than 10 cm.

39. A transparent slide having opposed front and rear surfaces, the slide carrying an array of biopolymers on a rear surface and an identification code on a front surface.

40. A transparent slide according to claim 39 wherein the identification code is carried on an opaque medium attached to the front surface.

41. A method comprising reading the array through the front side and reading the identification code from the front side.

42. A method according to claim 41 wherein the identification code is a bar code.